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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,876	07/02/2001	Taylor Pursell	46104	5376

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2000 M STREET NW SUITE 700
WASHINGTON, DC 20036-3307

EXAMINER

CLARDY, S

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 05/06/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/895,876

Applicant(s)

Pursell et al

Examiner

S. Mark Clardy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 3, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-200 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-200 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☒ Other: MPEP 2001, 2004

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Claims 1-200 are pending in this application which claims the benefit under 35 USC 119(e) of US Provisional Applications No. 60/216,162, and 60, 254,178, filed July 3, 2000, and December 11, 2000, respectively.

Again, applicants' claims are drawn to controlled release agricultural absorbent compositions (claims 1-122, 142-144) and methods of making them (claims 123-141, 145-200) comprising:

- 1) absorbent particulate material with 10-200 μ diameter capillaries/voids
claim 2+: expanded or exfoliated (claim 63) perlite, shredded newspaper, saw dust, cotton lint, ground corn cobs, corn cob flour, Metrecz absorbent, diatomaceous earth.
- 2) agricultural materials (optionally with an interspatial blocker¹, claim 35-49)
fertilizers (claims 7-14, 23-31): NPK, micronutrients, secondary nutrients, nitrification regulators², growth regulators³
insecticides (claim 32): OO-diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate
herbicides (claim 33): 2,4-D
fungicides (claim 34): ferric dimethyldithiocarbamate

The capillary/void spaces are impregnated (40-95%) with the agricultural materials. Only fertilizer compositions have been tested.

Claim 30 has been amended and the rejection under 35 U.S.C. 112, second paragraph, is withdrawn.

¹E.g., plant starches, protein gels, glues, gums, crystallizing compounds (sodium silicate, phosphate cements, calcium oxide cements, hydraulic cements: claim 44), gelling clays, synthetic gel forming compounds.

²Claim 14: 2-chloro-6-trichloromethylpyridine, sulfathiazole, dicyandiamide, thiourea, guanylthiourea

³Claim 30: potassium azide, 2-amino-4-chloro-6-methylpyrimidine, N-2,5-dicorphenyl succinamide, 4-amino-1,2,4-triazole hydrochloride

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Again, applicants have filed an eight page IDS which will be initialed, and returned when applicants have pointed out which of the many references they consider to be the closest art. Patent applicant has a duty not just to disclose pertinent prior art references but to make the disclosure in such a way as not to bury it within other disclosures of less relevant prior art. Golden Valley Microwave Foods Inc. 24 USPQ2d 1801. Applicant has an obligation to call the most pertinent prior patent to the attention of the Patent Office in a proper fashion and to attempt to patentably distinguish his claimed invention from the disclosure of the patent. Penn Yan Boats, Inc. 175 USPQ 260.

Applicant has argued that applicants have fulfilled the requirements pertaining to filing an IDS. Strictly speaking, that may be the case; however, upon reviewing MPEP sections 2001 and 2004 (copies attached), it would appear reasonable to request a more cooperative, good faith effort. First, when submitting an IDS, cumulative documents are not considered material to patentability and should not be submitted (MPEP 2001(b)). In the instant application, there are 200 claims, and almost as many documents (199) have been cited. There are many more documents listed in the IDS than there are components in the claimed composition. Either most of the cited references are cumulative in their disclosure with respect to the claimed invention, or they are irrelevant. Second, it is best to avoid submitting a long list of documents; if it is unavoidable, however, it is suggested that applicants highlight those documents which have been specifically brought to applicant's attention and/or are known to be of most significance (MPEP 2004, para 13). Applicants' assistance in wading through their huge IDS is requested. All documents will be considered and an initialed copy of the IDS returned; it's simply preferable to look at the most

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pertinent documents first. Doubtless, applicants have a shorter list of documents comprising the **closest** prior art. Please share it.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-200 are again rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Huber (US 4,657,582), Huber (US 4,923,506), Wilson (US 4,889,747), Lloyd et al (US 5,739,081), and Turnblad et al (US 5,876,739).

Huber '582, again, teaches compositions comprising granular products in which biologically active agents (herbicides, insecticides, etc.: col 3, lines 10-26) are entrapped in a polymeric matrix (col 1, lines 63-68, col 2). Optional filler materials include diatomites, attapulgites, bentonites, perlites, vermiculites, corn cob grits, wood flour, etc. (col 3, lines 5-9).

Huber '506, again, teaches granular controlled release systems for biologically active agents comprising biologically active agents (herbicides, insecticides, etc.: col 3, lines 10-23) are entrapped in a polymeric matrix (col 1-2). Optional filler materials include diatomites, attapulgites, bentonites, perlites, vermiculites, corn cob grits, wood flour, etc. (col 2, lines 64-68).

Wilson, again, teaches the utility of expanded perlite for making granular biocidal compositions. Any known biocide may be used (col 7, lines 1-10), in addition to various other additives.

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Lloyd et al, again, teach water dispersible granules (Abstract) in which biologically active substances (herbicides, insecticides, etc.: col 3, lines 19-56) are loaded into the absorbent granules which are made of finely divided particulate material such as bentonite, kaolin, attapulgite, diatomaceous earth, silicates, perlites, etc. (col 4, lines 8-47).

Turnblad et al, again, teach insecticidal seed coatings comprising polymeric binders, insecticide, and a filler (abstract). The binder provides voids or spaces which are occupied by the insecticide and filler (col 3, lines 23-44). Fillers include wood flours, clays, diatomaceous earth, inorganic solids, clays, perlite, vermiculite, etc. (col 3, lines 45-65).

One of ordinary skill in the art would be motivated to combine these references because they disclose the utility of adding the same inorganic filler materials to pesticidal compositions.

Thus, again, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have combined absorbent particulate materials and agriculturally active agents in a single composition because the prior art teaches that applicants' particulate materials were known fillers in biocidal (i.e., herbicidal, insecticidal) compositions. It would appear that filling voids in such filler materials would occur upon mixing whether the prior art refers to such an effect or not.

Applicants argue, for each reference, that the agricultural chemicals are on, and not in, the particulate carriers. Again, it would appear that, given the porosity and absorbency of the particulate materials (as recognized in the prior art), the agricultural materials would necessarily become entrapped in the granular materials, as claimed herein. It is noted that comparative data for the

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claimed compositions has been presented, with the comparative compositions identified as commercial fertilizers (see Example 16), but it is not seen that these materials are the closest prior art compositions. An evaluation of an invention's nonobviousness must compare the claimed invention with the closest prior art in order to be meaningful; otherwise, there is no basis for relating the claimed invention to the prior art in order to conclude whether or not it is unexpectedly superior and therefore unobvious. In re Wood and Eversole, 202 USPQ 171.

Further, it is noted that only fertilizer compositions have been tested. If claims to compositions other than fertilizers are to be found allowable, comparative data for such compositions is necessary. Objective evidence of nonobviousness must be commensurate in scope with the scope of the claims. In re Tiffin, 171 USPQ 294. A showing limited to a single species can hardly be considered probative of the invention's nonobviousness in view of the breadth of the claims.

No unobvious or unexpected results are noted; no claim is allowed.

Applicant has requested that this action not be made final because the IDS has not been initialed and returned. However, a complete search has been performed which would necessarily have encompassed the documents cited on the IDS. Withdrawal of finality remains an option, if it becomes necessary to cite additional documents.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the

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date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103c and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is (703) 308-4550.

A handwritten signature in black ink, appearing to read "S. Mark Clardy", is positioned above the printed name and title.

S. Mark Clardy
Primary Examiner
AU 1616

May 2, 2003

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MPEP 2001 Duty of Disclosure, Candor, and Good Faith [R - 2]

37 CFR 1.5* >6<. Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by § 1.97(b) - (d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) **Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application,** [emphasis added] and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

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MPEP 2004 Aids to Compliance With Duty of Disclosure [R - 2]

While it is not appropriate to attempt to set forth procedures by which attorneys, agents, and other individuals may ensure compliance with the duty of disclosure, the items listed below are offered as examples of possible procedures which could help avoid problems with the duty of disclosure. Though compliance with these procedures may not be required, they are presented as helpful suggestions for avoiding duty of disclosure problems.

...

13. It is desirable to avoid the submission of long lists of documents if it can be avoided. Eliminate clearly irrelevant and marginally pertinent cumulative information. **If a long list is submitted, highlight those documents which have been specifically brought to applicant's attention and/or are known to be of most significance.** Note *Penn Yan Boats, Inc. v. Sea Lark Boats, Inc.*, 359 F. Supp. 948, 175 USPQ 260 (S.D. Fla. 1972), *aff'd*, 479 F.2d. 1338, 178 USPQ 577 (5th Cir. 1973), *cert. denied* 414 U.S. 874 (1974). [emphasis added]